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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/973,656	10/09/2001	Mark Watson	476-2056	6184

7590

01/19/2005

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EXAMINER
LIN, KENNY S

ART UNIT	PAPER NUMBER
2154	

DATE MAILED: 01/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

RECEIVED**FEB 09 2005**

Technology Center 2100

Office Action Summary

Application No.

09/973,656

Applicant(s)

WATSON, MARK

Examiner

Kenny Lin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-940)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/9/2001
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-16 are presented for examination. Claims 1-15 are elected and Claim 16 is withdrawn from consideration.
2. The IDS submitted on 10/9/2001 have been considered by the examiner.

Election/Restrictions

3. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-15, drawn to computer to computer communication establishing, classified in class 709, subclass 227.
 - II. Claim 16, drawn to data structure, classified in class 707, subclass 102.
4. The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention II has separate utility such as transport addresses each corresponding to a different address domain. See MPEP § 806.05(d).
5. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

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6. During a telephone conversation with William Lee on 1/12/2005 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-15. Affirmation of this election must be made by applicant in replying to this Office action. Claim 16 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claim 14 is rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility. A computer program is consider as an algorithm which is not a process, machine, manufacture or composition of matter which in this case is inoperable by itself.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 9-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. The following terms lacks proper antecedence basis:

- i. Claim 9, lines 14 – “said address” (It is unclear whether the address stated here is referring back to the address of the entity in line 6 or the address of the network address translator in line 12);
- ii. Claim 12, lines 13 – “said address” (It is unclear whether the address stated here is referring back to the address of the entity in line 6 or the address of the network address translator in line 11).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant admitted prior art (AAPA), in view of Borella et al (Borella), US 6,697,354, and Hung et al (Hung), US 6,760,429.

13. As per claim 1, AAPA taught the invention substantially as claimed including a method of establishing a communications path between a first entity and a second entity in a communications network comprising at least two address domains, said address domains being connected by two or more address translators (fig. 1, page 5, line 28-31, page 6, lines 1-11), said method comprising the steps of:

- a. Sending a call set-up message from the first entity to a first one of the network address translators via only a first one of the address domains (page 6, lines 28-34), said call set-up message containing an address of the first entity within the first address domain (page 6, lines 32-36);
- b. Receiving the call set-up message at the first network address translator (page 7, lines 1-4);
- c. Forwarding the call set-up message to the second entity via a second one of the address domains and a second one of the address translators (page 7, lines 12-15) such that the information in the call set-up message can be used to establish a communications path from the second entity to the first entity (page 7, lines 12-15, communication is inherently established between the first and second entity through the address translators).

14. AAPA does not teach to retain the address of the first entity within the first address domain in the call set-up message as well as adding information about the identity of the first address domain to the call set-up message and that the information in the call set-up message can be used to establish a communications path from the second entity to the first entity which excludes one or more of said address domains. Borella taught a network address translation method to retain the address of the first entity within the first address domain in the call set-up message and insert adding information about the identity of the first address domain to the call set-up message and transmit the message to the second network (col.17, lines 23-41) and that the information in the call set-up message can be used to establish a communications path from the

second entity to the first entity (i.e., using the source address incorporated in the message). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of AAPA and Borella because Borella's teaching of adding header with source address and destination address enables AAPA to further insert data into the message and allows the receivers to identify the sender by using the addresses incorporated in the message.

15. AAPA and Borella did not specifically teach that the communications path excludes one or more of said address domains. However, Hung taught an entity to receive a call set-up message and use the message to establish a telephone communication with the sending entity such that the telephone communication excludes address domains (col.4, lines 16-17, 26-38). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of AAPA, Borella and Hung because Hung's teaching of establishing communications in response to receiving a request enables AAPA and Borella's system to establish communication by using the information obtained from the request and determining a proper communication path.

16. As per claim 2, AAPA, Borella and Hung taught the invention substantially as claimed in claim 1. AAPA further taught said step b of receiving further comprises creating a binding between a second address domain address for a port at the first address translator and the first address domain address of the first entity (page 7, lines 1-4). AAPA, did not specifically teach to add the second address domain address of that port to the call set-up message when the biding is

created. However, Borella taught to add the second address domain address of that port to the call set-up message (col.17, lines 23-41; see claim 1 rejection).

17. As per claim 3, AAPA, Borella and Hung taught the invention substantially as claimed in claim 1. AAPA further taught that after said step b of receiving, forwarding the call set-up message to a third network address domain via a third network address translator (fig.1, page 6, lines 1-3).

18. As per claim 4, AAPA, Borella and Hung taught the invention substantially as claimed in claim 3. AAPA further taught to comprise a third network address translator (fig.1, page 6, lines 1-3). Borella taught to add information about an identity of the third address domain to the call set-up message (col.17, lines 23-41). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of AAPA, Borella and Hung because Borella's teaching of adding header with source address and destination address enables AAPA to further insert data into the message and allows the receivers to identify the sender by using the addresses incorporated in the message.

19. As per claim 5, AAPA, Borella and Hung taught the invention substantially as claimed in claim 1. Borella further taught that said first address translator is arranged to access information from another network entity in order to carry out the method of step b of claim 1 in respect of adding information about the identity of the first address domain to the call set-up message (col.17, lines 54-56).

20. As per claim 6, AAPA, Borella and Hung taught the invention substantially as claimed in claim 1. Hung further taught that said communications path is arranged to provide a service that is hosted by one or more servers within the communications network but not within the first address domain (col.2, lines 35-47, col.4, lines 16-17, 26-38).

21. As per claim 7, AAPA, Borella and Hung taught the invention substantially as claimed in claim 1. AAPA further taught that said first address domain is provided in a private region of the communications network and said second address domain is provided in a public region of the communications network (page 6, lines 13-21).

22. As per claim 8, AAPA, Borella and Hung taught the invention substantially as claimed in claim 1. AAPA further taught that said communications network is selected from an Internet protocol communications network or an asynchronous transfer mode communications network (page 1, lines 9-30, page 5, lines 28-31, page 6, lines 1-3).

23. Claims 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant admitted prior art (AAPA), in view of Borella et al (Borella), US 6,697,354, and "Official Notice".

24. As per claims 9, 12 and 13-15, AAPA taught the invention substantially as claimed including an address translator suitable for connection between a first and a second address

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domain in a communications network (fig. 1, page 5, line 28-31, page 6, lines 1-11), said network address translator comprising:

- a. An input arranged to receive a call set-up message from an entity in the first address domain, said call set-up message comprising an address of the entity within the first address domain (page 6, lines 27-36).

25. AAPA did not specifically teach a processor arranged to modify the received call set-up message by adding information about the identity of the first address domain whilst retaining the address of the entity within the first address domain; and also adding information about an address of the network address translator itself within the second address domain to the call set-up message; said address being bound to the address of the entity in the first address domain.

Borella taught a processor having an address translation method arranged to modify the received call set-up message by adding information about the identity of the first address domain whilst retaining the address of the entity within the first address domain (col.17, lines 23-41); and also adding information about an address of the network address translator itself within the second address domain to the call set-up message (col.17, lines 23-41); said address being bound to the address of the entity in the first address domain (col.17, lines 23-41). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of AAPA and Borella because Borella's teaching of adding header with source address and destination address enables AAPA to further insert data into the message and allows the receivers to identify the sender by using the addresses incorporated in the message. AAPA and Borella did not specifically teach that the communication path excludes one or more of said

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address domains. AAPA and Borella did not specifically teach to add information about an address of the network address translator itself within the second address domain to the call set-up message. However, since Borella taught to add to the call set-up message data such IP addresses, it is obvious to add additional information to the message as well. Official Notice is taken that both the concept and advantage of the inserting additional information to a message is well known and expected in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of AAPA, Borella and further enable AAPA and Borella's system to insert more information to a message during the process of modifying the message.

26. As per claim 10, AAPA and Borella taught the invention substantially as claimed in claim 9. Borella further taught said processor is provided externally to the address translator and is connected to the address translator by a communication network (col. 17, lines 54-56).

27. As per claim 11, AAPA and Borella taught the invention substantially as claimed in claim 9. Borella further taught to comprise an output arranged to forward the call set-up message to the second address domain (col. 17, lines 38-41).

Conclusion

28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Verma et al, US 6,654,792.

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McNeill et al, US 6,167,052.

Harris et al, US 6,744,773.

Hirano et al, US 6,608,830.

Pannell et al, US 6,501,761.

Alkhatib, US 6,119,171.

Kubota et al, US 2002/0010799.

29. A shortened statutory period for reply to this Office action is set to expire THREE MONTHS from the mailing date of this action.

30. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenny Lin whose telephone number is (571) 272-3968. The examiner can normally be reached on 8 AM to 5 PM Tue.-Fri. and every other Monday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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ksl

January 13, 2005

 JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

FORM PTO-140

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

FILE

476-2056

SERIAL NO.

LIST OF INFORMATION CITED
BY APPLICANT

(Use several sheets if necessary)

APPLICANT

WATSON, Mark

FILING DATE

ART UNIT

U.S. PATENT DOCUMENTS

* EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS AND SUBCLASS	FILING DATE IF APPROPRIATE
	AA				
	AB				
	AC				
	AD				
	AE				
	AF				
	AG				
	AH				
	AI				
	AJ				
	AK				

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS AND SUBCLASS	TRANSLATION PROVIDED
	AL				
	AM				
	AN				
	AO				
	AP				

OTHER INFORMATION

74	AR	email dated 26 July 2001 to sip@ietf.org - Title: [Sip] update to nat traversal draft!
74	AS	email dated 31 July 2001 to sip@ietf.org - Title: [Sip] update to nat traversal draft!
	AT	
	AU	

EXAMINER

DATE CONSIDERED

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPER 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Notice of References Cited

Application/Control No.

09/973,656

Applicant(s)/Patent Under
Reexamination
WATSON, MARK

Examiner

Kenny Lin

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Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-6,119,171 A	09-2000	Alkhatib, Hasan S.	709/245
	B	US-2002/0010799	01-2002	Kubota et al.	709/249
	C	US-6,501,761 B1	12-2002	Pannell et al.	370/403
	D	US-6,608,830 B1	08-2003	Hirano et al.	370/351
	E	US-6,744,773 B1	06-2004	Harris et al.	370/401
	F	US-6,167,052 A	12-2000	McNeill et al.	370/399
	G	US-6,654,792 B1	11-2003	Verma et al.	709/208
	H	US-6,760,429 B1	07-2004	Hung et al.	379/265.09
	I	US-6,697,354 B1	02-2004	Borella et al.	370/352
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
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	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
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	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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